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ABSTRACT

This paper addresses itself to whether a causal relationship exists between childhood bereavement and later behavior disorders. The literature on the subject is reviewed, and the substantive findings and methodological problems of previous research are reported. In addition, the preliminary findings of an exploratory study conducted at the University of Minnesota are presented. These relate to two extensive followup studies undertaken in 1956-7 and 1960-6, based on original data obtained by Hathaway and Monachesi in 1954 of samples of ninth grade students in Minnesota. Indications were that bereavement in childhood may affect adult behavior with regard to marital status and number of offenses committed against the law. The prophylactic value of such followup studies is discussed.
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CHILDHOOD BEREAVEMENT AND
BEHAVIOR DISORDERS: A CRITICAL REVIEW

by

Eric Markusen
and
Robert Fulton

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Eric Markusen, B.A., is a National Institute of Mental Health Fellow in the Department of Sociology, University of Minnesota.

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Interest in childhood bereavement is part of a growing concern with the meaning that dying and death have for modern society. Increasingly medical and social scientists are turning their attention toward the issues and problems associated with contemporary mortality.¹ Despite the early work in psychology of Freud, Hall, Schilder and Bromberg, and the anthropological investigations of such scholars as Rivers, Bendann, Puckle and Lee, it was not until the 1930's that Eliot called for a more empirical and analytical study of grief.² It was only during the second world war, however, with the publication of Lindemann's classic paper, "Symptomatology and Management of Acute Grief," that the medical, psychological and sociological significance of bereavement were conjointly studied.³ Since that time the medical and social science literature has displayed an ever-increasing number of essays and studies in the area of death, grief and bereavement. Among the diverse topics studied have been: the shock of war and separation,⁴ attitudes of normal and mentally ill persons toward death,⁵ the development of children's attitudes toward death,⁶ mortuary rites and funeral functionaries,⁷ the social process of dying in institutions,⁸ and the social-psychological consequences of mass death and nuclear war.⁹

This paper addresses itself to the question of whether there exists a causal relationship between childhood bereavement and later behavior disorders. To do so we will review the literature on this subject and discuss

the substantive findings as well as the methodological problems of previous research. In addition, preliminary findings of an exploratory study conducted this past year at the University of Minnesota will be presented.

Concern with the consequences of parental loss has been stimulated by the theories and observations of such psychoanalysts as Freud, Deutsch, Klein and Bowlby.¹⁰ The importance that they attributed to the early parent-child relationship has given rise to the assumption that the rupture of this relationship by death or desertion seriously impedes the emotional development of the child. Sociologists, aware of the changing structure and function of the modern family have suggested, moreover, that such a loss is likely to be even more traumatic today in our limited nuclear families than was formerly the case when the traditional extended family was more the rule.¹¹ Like other social losses, death disrupts an ongoing social order. The bereaved individual must face not only a personal loss, but also a disruptive vacancy in his social system. Bereavement differs, however, from other social ruptures due to desertion, divorce and separation insofar as its agent, death, is fundamentally more mysterious as well as being completely irreversible.

Four research strategems have been used to determine the degree of association between childhood bereavement and later behavior disorder. They are: observations of recently-deprived children; clinical case studies; retrospective studies and anterospective or follow-up studies. Each strategy has its own peculiar advantages as well as its own limitations.

Direct observation of children recently separated from their mothers has provided much information about the consequences of parental deprivation.¹²

Such studies have in general concurred that developmental retardation of an indeterminate duration and reversibility results when the mother-child relationship is interrupted at an early age. The principal weakness of such studies, however, is their inability to provide information on the later consequences of deprivation; their conclusions are applicable only to the duration of the study.

Clinical case studies primarily of psychiatric patients have provided a second source of information regarding the possible effects of childhood bereavement.¹³ Such case studies have prompted researchers to attribute etiological significance to early bereavement for certain emotional disorders in later life. While such inferences are valuable as guidelines to research the unrepresentativeness of such samples seriously impairs the possibility of valid generalizations to the larger normal population.

The anteroseptive approach attempts to follow into adulthood a group of bereaved children and a group of non-bereaved children with differences in rates of behavior disorder noted. This strategy potentially provides a means of discovering why some bereaved children do not become maladjusted. While the anteroseptive approach is the method which permits the researcher to make the most comprehensive kinds of statements of any of the four methods mentioned, such studies, unfortunately, seldom have been undertaken. The reasons for this are due to: the prohibitive cost in time and money; the loss of original cases over time; and the possible changes in the theory and method of the study from the time of its inception to the time of its interpretation.¹⁴

The retrospective approach compares the past histories of two or more

groups of adults in order to determine whether they differ with respect to incidence of childhood bereavement. For instance, a group of diagnosed schizophrenics would be compared with a group of "normal" adults. Retrospective studies, because they permit a comparison of adult behavior with childhood bereavement and because they generally employ large numbers of cases, have been considered to be more effective tests of the "bereavement and maladjustive behavior" hypothesis than either the direct observation approach or the clinical case history method. What evidence we have of the long-term effects of childhood parental bereavement, therefore, is derived primarily from retrospective studies. Because of this fact, let us mention some of the methodological difficulties that have beset such research and, with these limitations in mind, review briefly their substantive findings.

Several methodological problems of retrospective studies seriously limit the validity and usefulness of the findings. These problems include: difficulties in obtaining "normal" bereavement rates; problems in selecting psychiatric patients for comparison with "normals;" deficiencies in data gathering; failure to consider demographic factors; failure to consider intervening variables which would affect the cause-effect relationship; inadequate use of statistical tests of significance; and fallacious deductions in interpretation.

The problem of establishing "normal" bereavement rates, against which to compare rates observed in psychiatric samples, is due to the fact that there is no consensus as to which kind of population to use as the "normal" control population. Retrospective studies have used three sources in order

to establish a so-called "normal" bereavement rate: nonpsychiatric medical patients, actuarial figures and rates from general population samples. Dennehy cites several studies which question the use of medical patients as representative of a "normal" population. She indicates that high percentages of medical patients have no discernable organic pathology, and she suggests that disguised or repressed psychiatric problems prompted them to seek medical attention.¹⁵ Pitts, et al discuss the limitations of actuarial figures by arguing that such figures underrepresent lower-class people who do not carry life insurance.¹⁶ Because of the sampling techniques employed, "general population" samples usually fail to satisfy the criterion of representativeness. The only nationwide source of information on normal bereavement rates has been the 1921 British census, but serious discrepancies are found in the various studies which employed it.¹⁷

Unfortunately, data on orphanhood were not obtained on subsequent British censuses. In other, smaller, population samples, few researchers have controlled for such factors as ethnicity, socio-economic class, religion, marital status or residence. Some studies have used as their "population sample" such unrepresentative groups as medical students,¹⁸ college students,¹⁹ and state mental hospital employees.²⁰

Another common problem in retrospective studies is the selection of psychiatric cases. Virtually all of the studies which were reviewed divided patients into conventional diagnostic categories, despite the fact that the validity and reliability of such categories have been repeatedly questioned.²¹

For this reason, comparison of studies of the same diagnostic entity is hazardous. Psychiatric patients, moreover, have been drawn generally from a single institution or from a private practice.²² Selective factors may be operant in either case since specific institutions and practitioners cater to populations in delimited geographical locations and within narrow socio-economic strata.²³ Since bereavement rates and behavioral pathology vary according to demographic characteristics of the population, findings cannot be generalized safely. Hilgard and her colleagues, for example, have published several studies using both controls and patients from exclusively urban and white populations.²⁴ Pitts, et al note that governmental institutions obtain patients from predominantly lower socio-economic strata and question comparison with "normal" rates derived from general population samples or actuarial rates.²⁵

Deficiencies in data-gathering have compromised the validity of many retrospective studies, and the variety of techniques used has precluded comparisons. The major sources of information for retrospective studies are interviews, questionnaires, and case records. In interviews with either patients or family informants, investigators must rely upon the memory, lucidity and goodwill of the patient or relative. Patients may be embarrassed to admit parental desertion and instead claim that the parent died, resulting in an over-estimation of the bereavement rate. Questionnaires may be useful, but without an indication of the return rate, their value is uncertain. High rates of non-return may reflect selective factors which merit consideration in analysis

and interpretation. Also, without some evidence that the wording avoids some of the frequent methodological problems observed in anonymous questionnaires, the value of the findings is dubious.²⁶ Case records, which are used in the majority of retrospective studies, are likely to be grossly inadequate means of ascertaining childhood bereavement rates. Such records are seldom compiled for the specific purposes of the research, therefore, the frequency with which cases must be discarded because of inadequate information is often very high. Blum and Rosensweig, for example, discarded fifty percent of their records because they lacked certain data on the siblings,²⁷ while Wahl discarded nearly one-third of his records.²⁸ Many studies do not report the number and percentage of discarded cases, thus possibly introducing a selective bias into the sample which remains. As Gregory states: "Such information (i.e. for hospital records) is often obtained from parents, particularly in the case of unmarried patients, and there is every reason to believe that a higher rate of parental deprivation might well be found among those patients' records which investigators have been obliged to discard on account of inadequate information."²⁹

Several researchers have criticized retrospective studies for failing to consider such secular, demographic trends as the generally declining death rate and the differential distribution of death rates among various sections of the population.³⁰ For example, Oltman argues that if the control and patient groups are not carefully matched according to age, differences in bereavement rates may be misinterpreted. Likewise, Gregory cites evidence

that atypically-high bereavement rates are observed in the lower socio-economic strata, among immigrants from certain countries, and among children whose parents are above-average age.³¹ The importance and difficulty of controlling for such secular factors when obtaining control and patient groups constitutes a major limitation of the retrospective design.

Retrospective studies are based on comparing the presence or absence of specific factors in two groups at two points in time -- that is to say, in the case of the behavior disorder hypothesis -- looking at two groups to compare the presence or absence of behavior disorders at the present time, and the presence or absence of parental loss in the past. Such a research design, therefore, runs the risk of making an unwarranted causal connection between the two factors and neglecting the possible presence of an intervening variable. Any attempt to assess the causal importance of a single traumatic experience in childhood for a specific behavior pattern in later life must consider the possible effects of intervening experiences. Not all children, it must be noted, who suffer early bereavement manifest later behavior disorders. The explanation for their freedom from traumatic aftermath may lie in such intervening experiences as: the nature of the pre- and post-bereavement home environment, the circumstances of the death, and the emotional characteristics of the surviving parent. If a retrospective study fails to acknowledge such potentially important factors, its basic design is inherently limited.

In his comprehensive methodological review, Gregory states that almost no adequate statistical tests of the significance of the observed differences

in bereavement rates have been utilized in presenting figures on parental deprivation.³¹ In most studies published since Gregory's review, however, researchers have demonstrated greater statistical and methodological sophistication. Such statistical sophistication is meaningless, however, as long as any of the above-mentioned problems are still present in the research design or in the data-gathering process.

Turning from an examination of the methodological problems that have plagued retrospective studies to the substantive findings that these studies have generated, bears out our initial reservations concerning the adequacy of the method. Numerous studies among schizophrenic patients, for example, have shown higher childhood bereavement rates among the patient group than among the control group.³² Other studies, however report just the opposite finding.³³ Obviously, no conclusions can be ventured on the possible etiological significance of early parental loss for later schizophrenia until the discrepancies among the findings are resolved. Hilgard and Newman used for their control group an urban community sample;³⁴ Granville-Grossman used nonschizophrenic siblings of his patients as their controls;³⁵ Oltinan and her colleagues administered an anonymous questionnaire to state mental hospital employees;³⁶ Pitts, et al used a matched stratified sample of medical patients;³⁷ Wahl used inductees into the Navy;³⁸ while Dennehy relied on the 1921 British census data.³⁹ A similar diversity is observed with respect to data-collection and data-analysis techniques.

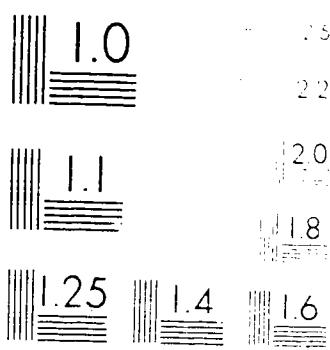
Studies of depression also report discrepant findings. Definitional

ambiguities and methodological idiosyncrasies prevent us from drawing any conclusions.⁴⁰ With respect to other diagnostic entities, such as neurosis or alcoholism, contradictory findings are once again observed: some studies report finding a significant association while others find none.⁴¹

On the basis of the current limitations of the retrospective method, therefore, one must conclude that retrospective studies have not provided a reliable answer to the question of whether early childhood bereavement is causally related to later behavior disorders.

We feel that our own findings, derived from an exploratory study utilizing the anteroseptive, or follow-up strategy, provide a potentially more fruitful approach to this issue. Our original data were obtained by Hathaway and Monachesi in 1954, when they obtained samples of 11,430 ninth-grade students in Minnesota.⁴² In their discussion, they argued that Minnesota is an advantageous source of population samples due to its predominantly second-generation and native-born population, its absence of large racial minorities, and its average economic position relative to other states.⁴³ Although their specific interest at the time of the study was to obtain a sample of sufficient size to permit valid predictions about delinquency, they were careful to gather a wealth of data which has been and still is useful to researchers concerned with many different issues.⁴⁴ Two extensive follow-up studies of the original cases were undertaken in 1956-57 and again between the years 1960 and 1966.

The average age of the ninth-graders at the time of the original 1954 sample was approximately 15 years. Thus, in the second follow-up, the



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the substantive findings as well as the methodological problems of previous research. In addition, preliminary findings of an exploratory study conducted this past year at the University of Minnesota will be presented.

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groups of adults in order to determine whether they differ with respect to incidence of childhood bereavement. For instance, a group of diagnosed schizophrenics would be compared with a group of "normal" adults. Retrospective studies, because they permit a comparison of adult behavior with childhood bereavement and because they generally employ large numbers of cases, have been considered to be more effective tests of the "bereavement and maladjustive behavior" hypothesis than either the direct observation approach or the clinical case history method. What evidence we have of the long-term effects of childhood parental bereavement, therefore, is derived primarily from retrospective studies. Because of this fact, let us mention some of the methodological difficulties that have beset such research and, with these limitations in mind, review briefly their substantive findings.

Several methodological problems of retrospective studies seriously limit the validity and usefulness of the findings. These problems include: difficulties in obtaining "normal" bereavement rates; problems in selecting psychiatric patients for comparison with "normals;" deficiencies in data gathering; failure to consider demographic factors; failure to consider intervening variables which would affect the cause-effect relationship; inadequate use of statistical tests of significance; and fallacious deductions in interpretation.

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The average age of the ninth-graders at the time of the original 1954 sample was approximately 15 years. Thus, in the second follow-up, the

Table 7

The Relationship Between Early Parental Loss and Offenses Against the Law: for Offenders

Childhood Family Status, 1954	Severity of Offense		
	Minor Offense	Major Offense	Total

Intact Family Background	285 88%	38 12%	323 100%
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Parents Divorced or Separated	28 76%	9 24%	37 100%
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$P < .05$

Table 8

The Relationship Between Early Parental Loss and Offenses Against the Law: for Offenders

Childhood Family Status, 1954	Severity of Offense		
	Minor Offense	Major Offense	Total

Intact Family Background	285 88%	38 12%	323 100%
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One or Both Parents Dead	31 84%	6 16%	37 100%
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$P = \text{not significant}$

Table 7

The Relationship Between Early Parental Loss and Offenses Against the Law: for Offenders

Childhood Family Status, 1954	Severity of Offense		
	Minor Offense	Major Offense	Total

Intact Family Background	285 88%	38 12%	323 100%
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Parents Divorced or Separated	28 76%	9 24%	37 100%
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$P < .05$

Table 8

The Relationship Between Early Parental Loss and Offenses Against the Law: for Offenders

Childhood Family Status, 1954	Severity of Offense		
	Minor Offense	Major Offense	Total

Intact Family Background	285 88%	38 12%	323 100%
--------------------------	------------	-----------	-------------

One or Both Parents Dead	31 84%	6 16%	37 100%
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$P = \text{not significant}$

What understanding of the pineal gland help to explain why some people in the nervous system show severe symptoms during certain seasons? For instance, is there a reason why people in temperate climates are more prone to colds in spring and fall?

What link between pineal secretion and sex hormones may help to explain various oddities in medicine, such as of periodic hypertension in women, who abnormal increases in blood pressure occurred like women only 17 days?

If the secretions of the pineal gland indirectly play a "clocking" role in man, as they may in animals, we may begin to ask ourselves what effect the manipulation of light and dark, whether our schedules of sleeping and awaking, and the illumination used during our working hours may have a pervasive, if elusive influence upon our moods and our health. Could the manipulation of FmE become an important factor in preventive and therapeutic medicine? Dr. Edmund Dewan and I have suggested that it is possible to entrain ovulation-time in women by lighting the bedroom, on certain nights. This implies that FmE may have an impact resembling that of drugs and that it may be affected by the same pharmacological principles.

During the last two centuries, people in the United States have lived at an increasing proportion of their lives in electric light which is "non-pulsating," as Doctor Wurtman says. It does not include all the pulsations of natural light. Electric light may be deficient, a form of disease, as far as the brain is concerned.

Many problems still remain to be investigated in biological rhythms. From whence of the brain do these rhythms originate? What is the biological mechanism that makes many biological phenomena fluctuate with the hours? When these questions are answered, important advances in medical research will be possible.

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REFERENCES

AKHIEZER, L. E., CHOU, C., and ALEXANDER, S. Brain serotonin concentration: elevation following intraperitoneal administration of 5-hydroxy-*DMT*. *Science*, **162**: 277-278, 1968.

AKHIEZER, L. Enzymatic synthesis of skin-lightening factor, melatonin, in amphibia. *Nature*, **208**(3008): 386, 1965.

AXENOR, J., and BLACK, J. B. Suppression of the daily rhythm in tyrosine transaminase activity by acute elevation of norepinephrine. *Nature*, **220**(5163): 161-162, 1968.

AXENOR, J., and WURTMAN, R. J. Laboratory of Clinical Science, National Institute of Mental Health, Bethesda, Maryland. The fate and physiological actions of melatonin, a pineal gland hormone.

AXELROD, J.; WURTMAN, R. J.; and SNYDER, S. H. Control of hydroxyindole-O-methyltransferase activity in the rat pineal gland by environmental lighting. *Journal of Biological Chemistry*, 240(72): 949-954, 1965.

AXELROD, J.; WURTMAN, R. J.; and WINGER, C. M. Melatonin synthesis in the hen pineal gland and its control by light. *Nature*, 201(4924): 1134, 1964.

BLACK, L. B., and AXELROD, J. Elevation and depression of hepatic tyrosine transaminase activity by depletion and repletion of norepinephrine. *Proceedings of the National Academy of Sciences*, 59(4): 1231-1234, 1968.

COHEN, R. A., (Moderator), and Discussants. Some clinical biochemical and physiological actions of the pineal gland. *Annals of Internal Medicine*, 61(6): 1144-1161, 1964.

FISKE, V. M., and HYPERIETTE, L. C. Melatonin action on pineal varies with photoperiod. *Science*, 162: 279, October 1968.

FRANK, R. J., and DOWLING, J. E. Rhodopsin photoproducts: effects on electroretinogram sensitivity in isolated perfused rat retina. *Science*, 161(3840): 487-489, 1968.

KOPIN, I. J., (Investigator), and GAVROZZI, A., (Author). Norepinephrine I: biography of a neurotransmitter. *Mental Health Program Reports 3*, National Institute of Mental Health, Chevy Chase, Md., January 1969. PHS Publication No. 17-100, pp. 67-88.

—, (Investigator), and WURTMAN, R. Daily rhythm in the noradrenaline content of the pineal gland. *Nature*, 217(5128): 574-575, 1968.

—, (Investigator), AXELROD, A.; WURTMAN, R. J.; and AXELROD, J. Visual pathway and pineal gland response to environmental light. *Science*, 155: 220-223, 1967.

—, (Investigator), FISKE, V. M., and BOT SQUIR, W. F. Department of Pharmacology and Toxicology, School of Pharmacy and Pharmaceutical Sciences, Purdue University, Lafayette, Indiana. Circadian rhythm in hepatic drug metabolizing activity of the rat. September 1967.

REIS, D. J., and WURTMAN, R. J. Diurnal changes in brain noradrenalin. *Life Sciences*, 7: 91-98, 1968.

SCHIEDKRAUT, J. J., and KERY, S. S. Biogenic amines and emotion. *Science*, 156 (3771): 121-130, 1967.

SCRIMSHAW, N. S., FISCHER, J. P.; et al. Effects of sleep deprivation and reversal of diurnal activity on protein metabolism of young men. *American Journal of Clinical Nutrition*, 19: 313-319, 1966.

SNYDER, S. H., and AXELROD, J. Circadian rhythms in pineal serotonin: effect of monoamine oxidase inhibition and reserpine. *Science*, 149(3683): 542-544, 1965.

—, (Investigator), and AXELROD, J. Light-induced changes in pineal hydroxyindole-O-methyltransferase: abolition by later hypothalamic lesions. *Science*, 151: 898-899, 1966.

SNYDER, S. H.; AXELROD, J.; WURTMAN, R.; and FISCHER, J. Control of 5-hydroxytryptophan decarboxylase activity in the rat pineal gland by sympathetic nerves. *Journal of Pharmacology and Experimental Therapeutics*, 147(3): 371-375, 1965.

SNYDER, S.; ZWEIG, M.; AXELROD, J.; and FISCHER, J. E. Control of the circadian rhythms in serotonin content of the rat pineal gland. *Life Sciences*, 3: 1175-1179, 1964.

SPOOR, R. P., and JACKSON, D. B. Circadian rhythms: variation insensitivity of isolated rat atria to acetylcholine. *Science*, 154: 782, 1966.

WURTMAN, R. J. Ambiguities in the use of the term circadian. *Science*, 156 (3771): 104, 1967.

—, (Investigator), and FISCHER, J. E. Effects of light and visual stimuli on endocrine function. *Neuroendocrinology*, Vol. 2. New York, Academic Press, 1967, pp. 20-51.

— Biologic rhythms in the body. *Technology Review*, 70(5):22-27, March 1968.

— Department of Nutrition and Food Science, M.I.T., Cambridge, Mass. Control of the mammalian pineal by light and sympathetic nerves.

WURTMAN, R. J., and AXELROD, J. The pineal gland. *Scientific American*, 213(1):50-60, 1965.

— The physiologic effects of melatonin and the control of its biosynthesis. *Problèmes Actuels D'Endocrinologie et de Nutrition*, 10:189-200, 1966.

— A 24-hour rhythm in the content of norepinephrine in the pineal and salivary glands of the rat. *Life Sciences*, 5:663-669, 1966.

— Daily rhythmic changes in tyrosine transaminase activity of the rat liver. *Proceedings of the National Academy of Sciences*, 57(6):1591-1598, 1967.

WURTMAN, R. J.; AXELROD, J.; CHIU, E. W., and FISCHER, J. E. Modulation of some effects of illumination on the rat estrous cycle by the sympathetic nervous system. *Endocrinology*, 75(1):3-10, 1964.

WURTMAN, R. J.; AXELROD, J.; and FISCHER, J. E. Melatonin synthesis in the pineal gland: effect of light mediated by the sympathetic nervous system. *Science*, 136(3512):1328-1330, 1962.

WURTMAN, R. J.; AXELROD, J.; and KRULL, D. E. *The Pineal*. New York: Academic Press, 1968, 199 pp.

WURTMAN, R. J.; AXELROD, J.; SIVARAJ, G.; and MOON, R. Y. Photic and neural control of the 24-hour norepinephrine rhythm in the rat pineal gland. *Journal of Pharmacology and Experimental Therapeutics*, 157(3):487-492, 1967.

WURTMAN, R. J.; AXELROD, J.; SNYDER, S. H.; and CHIU, E. W. Changes in the enzymatic synthesis of melatonin in the pineal during the estrous cycle. *Endocrinology*, 76:798-800, 1965.

WURTMAN, R. J.; CHIU, E. W.; and AXELROD, J. An inhibitory effect of melatonin on the estrous phase of the estrous cycle of the rodent. *Endocrinology*, 75(2):238-242, 1964.

WURTMAN, R. J.; CHIU, C.; and ROSE, C. M. Daily rhythm in tyrosine concentration in human plasma: persistence on low-protein diets. *Science*, 155:660-663, 1967.

WURTMAN, R. J.; ROSE, C. M.; CHIU, C.; and LARIN, E. F. Daily rhythm in the concentrations of various amino acids in human plasma. *New England Journal of Medicine*, 279(4):171-175, 1968.

WURTMAN, R. J.; SHOEMAKER, W. J.; and LARIN, E. F. Mechanism of the daily rhythm in hepatic tyrosine transaminase activity: role of dietary tryptophan. *Proceedings of the National Academy of Sciences*, 59(3):800-807, 1968.

WURTMAN, R. J.; SHOEMAKER, W. J.; LARIN, E. F.; and ZIGMOND, M. Failure of brain norepinephrine depletion to extinguish the daily rhythm in hepatic tyrosine transaminase activity. *Nature*, 219:1049-1050, 1968.

ZACHARIAS, L., and WURTMAN, R. J. Blindness: its relation to age of menarche. *Science*, 141(3622):1154-1155, 1964.

WHY ADOLESCENTS KILL THEMSELVES

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Using interviews and psychological tests, the grantee and his associates have compared 50 adolescents after an attempted suicide, with unsuicidal peers of the same age, sex, and background. Although economic privation, broken homes, and disciplinary problems were found in the control group—the sequence and timing of events occurred at a different phase in the development of the child. The profile of the suicidal adolescent includes long-standing problems with family, a stage of escalation during adolescence—the final stage of alienation—a chain reaction that dissolves the adolescent's closest personal bonds. Given detailed biographical knowledge of an adolescent, this study indicates that it should be possible to pick out the youth in danger, for adolescent suicide is not irrational but over-determined by sequences of life events occurring in critical periods.

"Tis because of us children, too, isn't it, that you can't get a good lodging?"

"Well, people do object to children sometimes."

"Then if children make so much trouble, why do people have 'em?"

"Oh, because it is a law of nature."

"But we don't ask to be born!"

* * * "I wish I hadn't been born."

"He got up and went away into the closet adjoining her room in which a bed had been spread on the floor. There she heard him say, 'If we children were gone ther'd be no trouble at all!'" * * *

"At the back of the door were fixed two hooks for hanging garments, and from these the forms of the two youngest children were suspended by a piece of box-cord round each of their necks, while from a nail a few yards off the body of little Jude was hanging in a similar manner."

—JUDE THE OBSCURE, Thomas Hardy.

Background

Adolescent suicide is horrifying, unthinkable, and a little unreal to most adults, for we tend to be complacent about the troubles of the young. To the modern adults, *Romeo and Juliet* may seem only a story. Yet many adolescents cling to one another in similar love, with the desperation of a last hope in a lonely world. A modern Juliet is likely to be a frightened and pregnant little girl; the boy is likely to be rejected, and both may feel totally alone.

Literary descriptions of childhood suicide seem bizarre, yet they resemble modern case histories. In Thomas Hardy's *Jude the Obscure*, the restless wanderings and misery of unmarried parents overcome an unwanted oldest boy. When he hears that yet another unwanted baby is coming, he kills himself and the other children. It is not that such events don't happen, but we are reluctant to believe them.

In 1965, Jacobziner estimated that there were 60,000 attempted suicides among young people under age 20 in the United States each year. Adolescence can be a particularly lonely and difficult period, a time of biological upheaval and social change. A person is expected to emerge from the safety and dependency of childhood into responsible maturity. Even healthy and happy adolescents become moody and oscillate between passions and depressions in a manner that the older people around them rarely understand. Most adolescents have fantasies about killing themselves in moments of rage and frustration or when they feel totally isolated from their families and friends. This is not surprising. Who has not imagined, with some glee, the remorse his parents would feel if he killed himself? Between such imaginings and the act lies the world of pathological events that Doctor Teicher and his associates have begun to define.

Statistics portray great misery among a large population of adolescents. Suicide ranks as the fourth most frequent cause of death for young people 15-19 years old. Fortunately, the vast number of attempted suicides in this age group are thwarted. An estimate of 60,000 suicide attempts a year may seem exaggerated, but hospital admissions offer a convincingly sad picture. In 1960, for instance, at New York's Bellevue Hospital attempted suicide was the reason for admitting 10 percent of the child and adolescent patients. At Kings County Hospital in Brooklyn, 13 out of every 100 children who came to the hospital had attempted or threatened suicide. Each month, the huge Los Angeles County-U.S.C. Medical Center admits about seven patients between 14 and 18 who have attempted to kill themselves; over 80 a year.

The Attempted Suicides

There has been a general tendency to dismiss a suicide attempt in an adolescent as an impulsive act stemming from a temporary crisis or depression. Perhaps it is soothing to believe that someone so young with "life ahead of him" could not have intended to kill himself. He could not have considered that he might die. On the contrary, Doctor Teicher and his associates at the Medical Center of the University of Southern California have found many adolescents who attempted to take their lives more than once. At first they may have used the drastic move as a threat to draw attention to their problems. Instead, it generally made matters worse. After an escalation of long standing problems and loss of any meaningful relations, many concluded that death was really the only solution to unsolvable, unbearable, and chronic problems.

Beginning with Freud around 1920, many keen minds in the development of psychiatry have wrestled with the problem of adolescent suicide, but inferences drawn from a few cases or psychological studies did not indicate how to predict a suicide from outside circumstances. In the fall of 1964, the investigator and his associates began to study the life situations of adolescents who attempted suicide, comparing them with control adolescents matched for age, race, sex, and family income--control adolescents who had never attempted suicide. Quite a few interesting patterns have been drawn from this study of 50 young people who attempted suicide. All were between 14 and 18. None of them was mentally retarded or obviously pregnant. All had been brought into the Los Angeles County-U.S.C. Medical Center sometime between September 1964 and May 1965 because of their suicide attempt.

At least one parent, usually the mother, was studied as well. For comparison there was a control group of 32 youngsters and their parents. Three-quarters of the attempted suicides were girls. On the average the suicidal adolescents were around 16 years old. They were white, Mexican, Negro, Protestant, Catholic, and Jewish.

Procedure: Change of Life Events

The procedure called for an interview with the adolescent patient within 24 to 48 hours after the suicide attempt. The parent or parents were also interviewed. Then, the suicidal youngster's therapy sessions in the hospital were taped and transcribed for further analysis.

Two biographies were elicited from structured interviews. There was the parent's version of his child's history, and there was the adolescent's version of his own life. On the basis of the case histories,

a life history chart was constructed for each suicide attempter and his matched control. This was done by constructing a chronology (in parallel) on a vertical continuum that depicted all the experiences of the adolescent from birth until the suicide attempt. These graphic charts show residential moves, school changes, the beginnings of various behavioral problems, separation, divorce, or remarriage of the parents, and deaths in the family. The charts were put in a sequence that displayed how the events tended to pile up at a particular point in the adolescent's life. This indicated how the crises had accumulated during the adolescent's life.

What events distinguished those who attempted suicide from those who did not? A simple comparison of events in the lives of the control group and the suicide attempters might not show that there was a very pronounced difference. The investigators discerned a distinct process leading to progressively deeper unhappiness and pessimism. The suicide-attempters went through a sequence that led to progressive isolation from the important people in his life. The control adolescents did not. The process can be summarized in three stages: The suicide-attempters all had a long-standing history of problems from childhood into adolescence. There was also a period in which problems seemed to escalate, usually at the very beginning of adolescence. Moreover, the problems mounted in a manner that seemed to exceed those of peers and friends. Finally, came a phase characterized by a "chain reaction dissolution of any remaining meaningful social relationships." This isolation occurred in the days and weeks preceding the suicide attempt.

Sequential Analysis of Life Events

The advantage of looking at things sequentially can be demonstrated by comparing the two groups. For instance, the life histories of the suicide-attempters showed that 72 percent of them came from broken homes, yet 53 percent of the control group also came from broken homes. Former studies of suicide have emphasized the fact that there were more broken homes among suicide attempters than "control" adolescents. However, none of these studies examined the broken homes of comparison groups. If one looked only at the incidence of broken homes and severed parental relations, there is ~~no great~~ difference between suicidal youths and comparable nonsuicidal youths. However, by looking at the chronological biographies of these two groups, the grantees have seen that the relevance of a broken home depends upon *when* the instability occurred in the child's development.

Critical Phase

Although 72 percent of the suicide attempters and 53 percent of the control adolescents came from broken homes, the timing of divorce and remarriage was different. In the suicidal group 58 percent of the parents remarried, but only one-fourth of the control parents remarried. Moreover, these control parents managed to remarry very early in the child's life and remained married. The parents of the suicidal adolescent either remarried quite a bit later in his life, or, if they remarried early, they were subsequently divorced and remarried several times again.

The chronological mapping of biographies shows that the suicidal adolescents' ~~had parents~~ who were divorced, separated, or remarried after the onset of adolescence. By contrast, the control families experienced change earlier, if at all. Instability in the home apparently had a differential effect depending upon the age of the child. Both groups experienced the instability of a broken home, but the nonsuicidal adolescents had a stable homelife during their last 5 years, while the suicidal youths had experienced instability then. As the investigators have written,¹

"This is particularly significant, not only because divorce, separation, or the acquisition of a stepparent is a stressful and disruptive event per se, but also because it occurs during a particularly stressful life time in the life cycle, i.e., adolescence."

A great many people who have written about suicide have implied that the loss of a parent in childhood might cause depression and perhaps suicidal feelings later in life. This study would not bear out such a conclusion, since the control group also experienced parental loss in childhood. Perhaps it is not loss of a parent in childhood that predisposes a person to depression and suicide in later life. Loss of a love object, as the grantee has remarked, is an important aspect of the process. But loss must be viewed as a part of the process, and particular attention must be paid to the time when it occurred. Most of the adolescents began their maelstrom descent toward suicide after a long period of alienation from parents. One 14-year-old who had tried to commit suicide twice was asked why. She replied, "It's my mother."²

Asked what her mother did, she answered, "We just don't get along. We haven't for 3 years. Before that we were like sisters and then it seems like since she divorced my stepfather it started a lot of trouble."

¹ Jacobs, J., and Teicher, J. D. Broken homes and social isolation in attempted suicides of adolescents. *International Journal of Social Psychiatry*, 13(2) : 146, 1967.

² Unpublished transcript.

This girl enjoyed being in the hospital and did not want to return home. It is particularly poignant that she wanted to be committed to a State mental hospital rather than return home. Many of the young suicide attempters described their alienation from parents as a process in which either the mother or father would nag them, would cut them off from their friends, would disapprove of their favorite friends, and thus made it difficult for them to have relationships outside the home, at the same time making life very difficult for them within the home. This was their version.

The Broken Romance

Typically, many of these adolescents had fallen in love and formed very possessive and exclusive romantic relationships. This actually isolated them even more. A girl and boy would concentrate so intensely on one another that they tended to cut off all their friends. Then, if the romance failed, they would feel hopeless, lost and despairing.

At the time of the interviews none of the adolescents in the control group was ending a romance, but a number of the "suicidal adolescents" had just broken a romance. Moreover, five of these girls were either pregnant or feared that they were pregnant. As the biographies revealed, pregnancy inevitably led to a great sense of isolation. These girls withdrew and were rejected by their boyfriends. Usually, they were also rejected by their parents at this time when they most needed support. The suicidal adolescents were really in a state of depression compared with their counterparts, and, indeed, as the grantees point out, this seemed to have been prompted by their real experiences in life.

The Way They Saw It

Only 33 percent of the suicidal youngsters considered their childhood to have been happy. But about 94 percent of the control group considered childhood to have been a happy time for them. In describing the biographies, the investigators wrote:²

"Judging from the verbatim accounts of the suicide-attempters in the interviews as well as the suicide notes left by them, and notes written by other adolescents outside our sample, the decision to suicide was the result of a rational, decision-making process. However, the choice of death is not based on a desire to die. They would, if they could, choose to live. Death, in a sense, is not chosen at all but results from the progressive failure of adaptive techniques to cope with the problems of living, where "the problem"

² Jacobs, J., and Teicher, J. D. *Broken homes and social isolation in attempted suicides of adolescents.* "International Journal of Social Psychiatry," 13(2) : 148, 1967.

is the maintenance of meaningful social relationships. In short, the potential suicide felt he had no choice, i.e., *desire to live*. It is from this recognition of necessity that the sense of choice stems and immediately preceding the act itself there is often a feeling of well-being, a cessation of all care. This is evident in the matter-of-fact presentation found in suicide notes.

Profile of Problems: Disruption at Home and Discipline

Early in childhood or adolescence the suicidal youngsters usually experienced the break-up of their home. In some cases this meant the institutionalization of the child or a family member. Many of them were placed in foster homes or left with relatives. Many of them changed schools and residences frequently. Many of these families were very poor. In some cases, the parents also had been depressed and had attempted suicide. A sizable percent of the suicidal youngsters had either a parent, relative, or close friend who had attempted suicide. Seventy-two percent had one or both of their natural parents away from home, either because of divorce, separation, or death. Most of those living with stepparents felt they didn't like the stepparent. A great many had a parent who was married several times. In about 62 percent of the cases both parents were working. Half of these families lived on less than \$3,600 per year. The background is one of poverty, instability, and unhappiness.

The specific period just preceding a suicide is characterized by a vicious spiral of events. It may begin when a parent feels unable to cope with some behavior in his or her adolescent. The parent begins to nag and use severe disciplinary procedures to prevent the youngster from going out. He may resort to physical punishment. Parents of the suicidal adolescents felt that their children would get into less trouble if they were watched more closely. Therefore, they would question them about their activities and whereabouts. Because the adolescent's trust in his parent somehow depended upon dignity and the maintenance of a certain amount of privacy, questioning set up a vicious circle of mistrust. From the point of view of the adolescents (as revealed on a rating scale), withholding privileges, fussing, nagging, and whipping were considered the worst disciplinary techniques. The suicidal adolescents and their nonsuicidal counterparts agreed on this rating. At the same time, some of the adolescents felt they would gladly forego undesirable behavior, and their parents should have helped them to discourage this behavior. When the parents didn't intervene, the young people took it as a sign of rejection.

As the parent-child situation got worse, the parents grew frustrated, and the adolescent felt that his parents couldn't understand and were punishing him inappropriately. The biographies revealed that this impasse led to the adolescent's rebellion or withdrawal. This stage of

deterioration usually led to a breakdown of communication between parent and child, in which the youth's withdrawal was a consequence. Essentially, both parent and adolescent would give up and stop trying to communicate.

Many suicidal adolescents said that they got into the habit of lying and would simply withdraw into their rooms, or withdraw into themselves in order to avoid their parents and conflict.

School

A third of the adolescents who had attempted suicide were out of school at the time. Either they were ill because of pregnancy or because of an earlier suicide attempt. An astonishing number had already attempted suicide in the past. A quarter of these suicidal adolescents had been out of school because they were acting up in class, had shown some emotional instability, or had been involved in fights. Half of them had been truant from school during the last 5 years because of lack of interest or active distaste.

To Whom Do You Turn in Time of Trouble?

When asked to whom they turned when they were in trouble, a quarter of the suicidal adolescents said there was no one to turn to. None of the control adolescents felt such isolation. The pathos and the loneliness of the suicidal adolescent is very dramatically shown in some of the figures. Of the 46 percent who reported their suicide attempt to other people, less than half reported it to their parents. Almost two-thirds of them talked to people other than family members. This is particularly significant since 88 percent of the suicide attempts occurred at home, very often with the parents in the next room. In every instance, the lack of communication between family and the child and lack of communication with peers was a very important factor in the period leading to suicide. On interview, these suicidal adolescents conveyed the despairing sense that death was the only solution, there was no other way out. Consider these excerpts from a letter by a 17-year-old Negro boy to his father. This note was written the evening before he made his second suicide attempt:

"Dear Father, I am addressing you these few lines to let you know that I am fine and everybody else is and I hope you are the same. Daddy, I understand that I let you down and I let Mother down in the same way when I did that little old thing [the suicide attempt] that Wednesday night. Daddy, I am sorry if I really upset you, but Daddy after I got back I realized how sad and bad you felt when I came back to California.—I had lost my best girl the week before I did that. I had a fight because some

dude tried to take advantage of her when I sped to the store, so I came back and I heard a lot of noise like bumping so I run in and there he is trying to rape my girl, my best one too. - Daddy I tried as hard as I could to make it cheerful, but it does get sad. Daddy I am up by myself. I've been up all night trying to write you something to cheer you up, because I could see your heart breaking when you first asked Sam's wife if they would have room and that Sunday Dad, it was hard but I fought the tears that burned my eyes as we drove off and Daddy part of my sickness when I had taken an overdose I did just want to sleep myself away because I missed you Dad.

"But when I left I felt like I had killed something inside of you and I knew you hated to see me go, and I hated to go, but Daddy, well, I kind of missed Mother after I had seen her. I miss you and remember what you said, 'settle down', but Daddy I tried so hard so I went and bought some sleeping pills and took them so both of you could feel the same thing." *

When an adolescent has retreated from family problems into a love affair, and then the romance breaks up or culminates in pregnancy, then there is even more isolation than before. A girl is especially alone if her boy friend disappears and she has already alienated other friends. Parents often become disillusioned and give up at the time their child needs help the most. In a letter to her former boyfriend, a desperate young girl showed the lengths to which she would go for a social relationship and a solution to the problem of pregnancy. She wrote on the night of a suicide attempt. A short excerpt indicates the tragic sense of rejection and isolation.

"Dear Bill, I want you and I to get an understanding about certain things because I think you got the wrong impression of me * * * and believe me it hurt. I knew all the time you were hinting to me I was too young, didn't know nothing about life, but you were wrong. I know a whole lot about life. I'm ashamed of the things I know to be so young. I couldn't tell you this personally, 'cuz I couldn't free what you might have said and I sure it would have hurt my feelings badly. I'm two months pregnant by you. You don't have to admit it, I don't care. You may say anything you like. You don't have to worry about any trouble. It would be a disgrace for me to let people know I threw myself on you knowing you didn't care or feel anyway toward me. Don't worry, no one will ever know my child's father. I will never mention you to him or her whichever it be." *

Parents and Physicians: Surprised

Despite the history of increasing problems, the families were inevitably hurt and surprised by the suicide attempt. Parents and physicians who had seen the adolescents would say "it was so unexpected."

* Teicher, J. D., and Jacobs, J. Adolescents who attempt suicide: Preliminary findings. *American Journal of Psychiatry*, 122(11):5, May 1966.

* Teicher, J. D., and Jacobs, J. Adolescents who attempt suicide. "American Journal of Psychiatry," 122(11), 1966.

Actually, some 46 percent of the suicide-attempters had visited their physicians at some time before the attempt. Over half had been treated for some physical or mental disturbance during the prior 5 years. A third had some serious physical complaint, and a third of them had some family member who was sick or had been hospitalized. In screening the adolescents to be included in this study, Doctor Teicher and his associates examined over 100. In the first 30 they found 11 with duodenal ulcers.

In spite of the long history of problems, however, the physician and mothers acted surprised by the suicide attempts. While perhaps expressing some guilt, the mothers would deny that there was anything in the home situation that would cause a suicide. The very people who were closest to the suicide-attempters apparently failed to see the progression of social isolation: the problems with parents, with poverty, broken romances, excommunication from school or peers, especially in the instance of pregnancy. Since these are problems that most people would be reticent to discuss with others, adolescents in such predicaments are especially isolated.

After a period of not communicating, their first suicide attempt came as a surprise to parents, friends, and schoolmates. The physicians who saw them just after the attempt had been taken off guard perhaps because suicidal people are not easily distinguished from others with severe problems. There seem to be no simple and convenient ways of anticipating a suicidal attempt. No litmus test can determine who is a potential suicide. Clearly a major reason that suicidal attempts are not warded off is lack of communication of the real feelings. The true biography of the unhappy person was not known by anybody around him.

Profiles for Prevention

Adolescence is a time of sufficient duress for parents and youngsters as new behavioral problems arise. Moreover, many of the suicidal youngsters in the Los Angeles study also had illness or mental illness in their family during the preceding 5 years. Doctor Teicher and his associates feel that various sets of events must be considered in anticipating suicide. Among them are such factors as economic status, geographic mobility, and the divorce rate in the home. These alone do not predict suicide. However, these events seem to occur at particular times in the adolescent's life and the timing may be critical. Along with an escalation of behavioral problems, a youth who is isolated from family and peers may be in danger of trying suicide.

It should not be surprising to learn that their parents also had unhappy histories. The mothers often got married only because they were pregnant. Some had illegitimate children. Quite a few suffered

depression and were depressed after giving birth. This was particularly notable among the mothers of the boys who had attempted suicide. Many had illegitimate children or had been forced into marriage because of pregnancy. Seventy percent of them were separated or divorced, a good number of them after short-lived marriages of convenience. Needless to say, a huge percentage had suffered from economic deprivation.

Male Suicide

The number of suicides and suicide attempts among girls far outweighs the number of attempts among boys; and this has been associated with broken romances, rejection, and unwanted pregnancy. In attempting to understand the male suicide attempts, Doctor Teicher and Dr. N. L. Margolin did a special study of 13 of the boys in their group. They were interviewed by one of the authors after their suicide attempt. Identical questionnaires about parent-child relationships and school, about adjustment to peer groups and career aspirations were given to the boys and their parents. Both took a battery of psychological tests in addition.

The boys in the control group also came from broken homes. Many had both parents working and relatives living with the family. However, the vignettes of the suicidal boys differed in that they showed a repeated sequence of events which the authors summarize in this order: They had, first of all, a mother who was angry, depressed, or withdrawn, both before and after pregnancy. Generally it was an unwanted pregnancy. Then, there was the loss of some very significant person or persons in the patient's early life, usually the loss of the father. There was also a reversal of roles with the mother. At the time of the suicide attempt it had seemed to the boy that the mother (or his mother-surrogate) was also going to leave his life forever. During the boy's period of distress his mother was preoccupied with her own depression, up to the time of her son's suicide attempt.

An 18-year-old Mexican-American boy is typical. His mother never wanted him. She became very overprotective until he was about age 12. At age 5 his semi-alcoholic father left the home. At this point he and his mother began to shift around from house to house, mostly living with his grandmother. After the divorce he began to get headaches. His mother thought he missed his father. He always felt rejected, and he made depressed statements such as: "I wish I hadn't been born." Then at the age of 15 he was rejected by a girl. This left him emotionally fractured. He would get into romances where he was inevitably hurt and depressed. His mother felt she had never been shown any love or affection by her own family, and she was a chronically depressed person. She explained that, as she was getting older,

she had been dating two men. One was a rather selfish man who overloved her son. She broke up with him. Her boy was then 17 years old.

"I was a very bad and stupid woman. I didn't realize what I was doing to my son, how sensitive and emotional he was. Well, time went by and Tom started to go to parties and dating, not too often, but he had started to have friendships on the outside. Soon after I met someone at work from the same department and we got along real well. He was divorced also. He has a family of three to support, so we have quite a lot in common. The man moved in. He liked my son and went out of his way to cultivate him, but apparently things went along very well until Tom started to complain that since Sam had moved in with us he was nothing around the house just in my way, that I didn't love him any more, but that was not true."

In a pleading letter to the doctor she asked what he could do to repair the damage he had done her son at an early age. Here was the tragic pattern of events—the unhappy circumstances around his birth, the absence, his father's withdrawal, infantile identification with the mother, frequent moves, repeated loss of peer relationships, the clinging to an angry and depressed mother, and, finally, the threatened loss of the mother to a new man. Case after case revealed this kind of misery, longing, and frustration in the first years of life. In 11 cases the fathers were physically absent from the home. In eight instances the mothers had left home before the child was 6 years old. Almost all the boys were prevented from being children. They were thrust into the role of helping their mothers either because they were the only child, in each case there was also a sense of loss on the part of the child, either because the mother and father had just separated, because the mother had a serious illness, or because the father had just recently left home. In one instance, the mother was recently married, and the boy had been left by his girl friend.

On the basis of our data we find that the male adolescent suicide attempt seems to have its origins in the mother-child relationship in infancy. Most importantly, these relationships included not only early deprivation, but chronic repeated separations, threat or object loss. This state of affairs leads to continued, unrelenting, archaic identification with the mother. The lack of a masculine image in the experience of these boys together with the availability of the mother prevents any working through of the Oedipal phase of development.⁷

Young and dependent child needs his mother and cannot "allow" anyone else. He then blames himself for anything wrong in the environment, which allows him to soak up the badness, as it were, making

⁷ See also, S. L. and Telicher, J. D. "Thirteen adolescent male suicide attempts," *Journal of the American Academy of Child Psychiatry*, 7(2):301, 1968.
See also p. 312.

things around him all right. The investigators suggest that this situation eventually creates a self-destructive pattern.

"The early and repeated separation trauma resulting in disturbances in early ego and superego development lay the foundation for later pathological identification, and leave their marks on character formation and personality development. As the child enters adolescence, the conflicts over separation intensify due to a number of concurrent reasons, all of which essentially have to do with the biological and psychological need to be autonomous from the mother. The adolescent male tries to defend himself against feelings of helplessness in many ways. He may regress to feelings of omnipotence and pseudo-dependence and seek challenging, dangerous situations such as reckless driving, motorcycling, etc. He may act out antisocially as a defense to prevent loss of identity. However, it seems that these defensive attempts cannot be maintained when actual separation from the mother is threatened. This threat can occur in the form of the mother's withdrawing because of her depression, her becoming interested in a new husband, etc. Also significant is the breakup of the adolescent's romance, i.e., experiencing the loss of a mother surrogate. When the mother becomes depressed and suicidal, the adolescent perceives rightly that his very existence is a burden upon her. He acts as if he were saying, 'If I destroy the bad part of myself, then mother will live to care for me.'

"Internally, ego regression with splitting occurs. The split-off part of the ego, representing the bad self, is rejected and persecuted by the parts of the ego and superego identified with the rejecting suicidal mother. *This identification is of great significance in the suicidal adolescents.* Freud (1923) states that the ego, feeling hated and unprotected by the superego, will let itself die, a situation that is similar to the anxiety in infantile separation from the mother."⁸

In these 13 cases, the boys professed to love their nagging and ambivalent mothers. They did not necessarily feel they were loved, but because of an infantile dependence, the mother's depression, anger, withdrawal, and disapproval had a very devastating effect upon them. In many instances, the mother also had suicidal thoughts, and the boys identified with their mother's depressed and suicidal state. Interestingly enough, the suicidal girls described their mothers in uniformly glowing and idealized terms and denied any flaws, despite the fact that their mothers were often very hostile.

"The suicide attempt is an overdetermined symptom and whether it is an attention-getting or an attempt to die it is always serious. It is an effort to solve a chronic problem, living; a plea for help; an expression of rage and hostility; and at times a symbolic reunion with the pre-Oedipal mother or father."⁹

⁸ Op. cit. pp. 312-313.

⁹ Telcher, J. D. The treatment of the suicidal adolescent. "Proceedings of the IV World Congress of Psychiatry," p. 749, Madrid, September 1963. Excerpta Medica International Congress Series No. 150.

Therapy

In many ways the therapist in the hospital has proven to be the lifeline of these youngsters. He maintains his contact with the suicide attempters from the beginning of consultation until final rehabilitation or referral. When they are first brought to the hospital they are shaken, anxious, depressed, insecure, guilty, and apprehensive because of the anger and hurt that they've caused. They feel terribly alone, and this is probably their worst agony. Usually the mother has been angry and sometimes guilty; her next reaction is usually hostile and she will defend herself with great denial. The father, or more usually the step-father, would consider the suicide attempt a bother and show little concern. Doctor Teicher recommends that suicidal adolescents should be hospitalized, if only briefly, and placed in a ward where there are other adolescent patients to offer warmth, support, and understanding. In many instances the patients of this study didn't want to leave the hospital, and they would cling to the staff and other patients. Adolescents will often talk about the precipitating events, such as their parents' refusal to let them go out, or a broken romance. The rejection by a boyfriend or a girl friend is a most common precipitating factor, but this would be taken in stride as an unhappy experience if there had been some positive experiences earlier in life. The role of the therapist as seen by the investigators is that of a person who provides understanding and love. Slowly the therapist can guide a young person to cope with his conflicts and communicate with his family. Meanwhile he offers support and is always available so that the adolescent doesn't feel so lonely and isolated.

From this study one may clearly see that youth, itself, is no antidote to a hostile environment. The old myth that all suicide attempts are impulsive and irrational is forever banished, and in this study one can see how an accumulation of adverse factors at a critical period shapes the biographical profile of the potential adolescent suicide. This profile might be used in further studies to predict and prevent suicide attempts.

This brief research has already shown that no simple correlations between life events can predict suicidal despair in a young person. Yet young people—in shockingly vast numbers—are miserable enough, and lonely enough that they are brought to hospitals by the tens of thousands each year, after attempting to kill themselves, often in a room right next to their parents.

Further research in this area has implications beyond suicide prevention. The development of biographical profiles may yield techniques whereby informed doctors, social workers, and school personnel might spot the precarious young person in time to obtain therapy for him. However, the import of this research is broader in its implications.

It begins to fold back the curtains upon the circumstances and the timing that weaken an individual to the stresses of life and alienate him from all of those who might help him. The chain of misery seems to pass from one generation to the next, and in each case privation plays its part. Moreover, the relations of family members show a psychodynamics that produces instability and separation instead of cohesion and mutual help. Adolescence can be an especially creative and exciting time of life. In this particular era, adolescents are having an ever-increasing impact upon society—they have changed the entire genre of popular music, for example—but exceedingly great numbers of adolescents are having the opposite experience. Suicide prevention studies among the most unhappy of these people may give considerable insight into what it takes to deflect an entire life from misery toward productiveness and participation.

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References:

JACOBS, J., and TICHTER, J.D. Broken homes and social isolation in attempted suicides of adolescents. *International Journal of Social Psychiatry*, 13(2): 140-149, 1967.

JACOZINER, H. Attempted suicide in adolescence. *Journal of the American Medical Association*, 191(7): 41-44, 1965.

MAGGINS, N. L., and TICHTER, J. D. Thirteen adolescent male suicide attempts. *Journal of Child Psychiatry*, 7(2): 293-314, April 1968.

TICHTER, J. D. The treatment of the suicidal adolescent—the lifeline approach. *Proceedings of the IV World Congress of Psychiatry*, Madrid, September 1966. Excerpta Medica International Congress Series #150.

TICHTER, J. D., and JACOBS, J. Adolescents who attempt suicide: preliminary findings. *American Journal of Psychiatry*, 122(11): May 1966.

—. The physician and the adolescent suicide attempter. *Journal of School Health*, 30(9): 403-415, November 1960.

SERVING AN URBAN GHETTO THROUGH A COMMUNITY MENTAL HEALTH CENTER

TEMPLE UNIVERSITY
COMMUNITY MENTAL HEALTH CENTER
Philadelphia, Pa.

Elmer A. Gardner, M.D., Director

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Introduction

Evaluation of mental health services is one of the most difficult of all tasks in the mental health field. However, Dr. Elmer A. Gardner, director of the Temple University Community Mental Health Center, tells of a simple method which seems to have given the right answer in his case but which he does not recommend. It was forced on him.

The Temple Center is located in North Philadelphia, an urban problem area—lying directly north of Philadelphia's downtown section—that is home for more than 200,000 persons, most of them poor and 80 percent of them black. The area has the city's highest rates of crime, infant mortality, substandard housing, and unemployment. Until recently, and with some cause, residents of the community had tended to regard the university as an indifferent and even injurious representative of the White Establishment.

During the Center's first year of operation, thieves stole \$10,000 worth of typewriters and other office equipment. For a while they got in by breaking windows; when the Center put bars on the windows of its main offices, the burglars forced the doors.

Finally one morning, after arriving to find still another typewriter gone, Doctor Gardner called the staff together. "If the thefts continue," he announced, "we are going to have to give up, and the staff will disband." Word spread throughout the community. There have been no more thefts. As Doctor Gardner sees it, even the thieves considered the center too valuable to the community to be abandoned.

More conventional means of evaluation can be offered. During the year before the Center became fully operative, which was in October of 1967, approximately 1300 persons from its catchment area had had one or more psychiatric contacts of some kind, and 480 of these persons had been hospitalized. On the average, each of the 480 spent 77 days in a hospital, usually Philadelphia State or the Veterans Administration Hospital. In contrast, during the Center's first year of full operation, it served 1700 catchment area residents, of whom only 300 were hospitalized, and these 300 averaged only 40 days in the hospital.

"In other words," Doctor Gardner reports, "about 37 percent of the people getting some sort of psychiatric service the year before we opened were hospitalized at least once. The following year, only 18 percent of such people were hospitalized." This 50-percent reduction occurred mainly, the director believes, because the Center had something besides hospitalization to offer to its 200 new patients a month.

Organization for Service

Of decided importance in helping the Center realize its varied "something besides hospitalization" program are its Mental Health Assistants—nonprofessional community residents who have been trained at the Center and are professionally supervised and given further training on the job. The training and work of the MHA's are reported in a later section.

The "something besides hospitalization" now includes:

- The Crisis Center, the emergency end of the outpatient services, where a psychiatrist is on duty 24 hours a day and other staff members are either on duty or quick call. Of the 15 patients seen daily, about a fourth are brought in by the police, a fourth come from the emergency department of the Temple Medical Center (after an examination suggests that their trouble is primarily psychological), a fourth have been referred by other agencies, and the others walk in from the street or are brought by their families. All these patients need or think they need immediate help, and they get it because the Crisis Center defines a crisis as "anything that somebody thinks is a crisis." At one end of the scale, the patient may be hallucinating or suicidal; at the other end, a person may have a marital, financial, or other problem and feel the need to talk to someone right away. The Crisis Center offers either immediate treatment or immediate emotional support.

- The Psychosocial Clinic, so designated because it serves both the individual whose problems are mainly social—bad housing, no job, shortage of food—and the individual whose problems are more strictly psychological. Its services include individual and group therapy, home visits, and the enlistment—with help from the Center's

other units--of the resources of such community agencies as welfare, housing, and job training. This clinic and the Crisis Center, functioning under the same director, serve as the major intake point for the whole Center and comprise its outpatient program.

• A satellite center, which serves a neighborhood 2 miles away. It was opened in the Spring of 1968 at the request of the Emanuel Methodist Church, which pointed out that many of the nearby residents would seek the help they needed if it were available close to where they lived. The Church gave this outreach station a waiting room, an office, and a meeting room. In less than a year, the satellite center had 200 patients on its list. Five other satellites are being established.

• The Partial Hospitalization Unit, which offers, (a) a day program differing in important respects from at least most such programs elsewhere (for example, the 30 individuals taking part are never referred to as patients, though many are psychotic and some have spent years in mental hospitals, but as "members," and these members participate in many of the unit's most important decisions), and (b) a night program offering group and individual treatment for 15 persons and a dormitory for eight, who hold jobs or go to school but are not well enough to face family strains, or the temptations of the streets, night after night.

• The Children and Family Unit, which helps patients either directly or through consultation with other divisions of the Center, particularly the clinic; consults with schools and the welfare department; and works with groups of parents in a preschool enrichment program. Through this unit also, the Center supports three "incentive specialists" of the Young Great Society, which is an organization of young Negro men dedicated to improving the community. The specialists, interested Negro nonprofessionals, go into the schools to work with youngsters who have motivational or other learning problems. Their primary job is to help a youngster "make it" in his grade and go ahead prepared for the work in the next. But the specialists serve as case detectors, too, referring disturbed children to the Center. In addition, the children's psychiatrist who heads this unit and members of his staff meet with the incentive specialists and the teachers to discuss a school's mental health problems. These often seem to be problems of communication between faculty members from one social class and students from another. This unit also works with youngsters, who have been suspended or expelled, the goal being to help them change their behavior and to persuade the schools to take them back. A program of care for the mentally retarded is being developed.

• The Consultation and Education Unit, which has established mental health training programs for policemen, public health nurses, ministers, and workers in a variety of voluntary, State, and city agencies. These programs try to help the participants handle more effec-

tively the problems they face daily. The Community Organization section of this unit has embarked on several projects believed to be either unique or rare among Community Mental Health Centers. These include: (a) cooperative work with a tenants' council to withhold rent from landlords, as permitted by law, in order to force them to meet the legally established standards of repair and maintenance; (b) the establishment of a "patient's advocate service" to present complaints about the work either of the Center itself or of other community agencies to a council of community representatives; and (c) an effort to foster political awareness among community residents.

• The Social Adjustment and Rehabilitation Unit, headed by a vocational psychologist, which works both within the Center and with agencies and industries in the community to find training programs and jobs for the hard-core unemployed treated at the Center. The unit directs several rehabilitation counselors of its own and "re-activities therapists," who are graduates of the Mental Health Assistant training program. The counselors and therapists are assigned to the day program, the outpatient clinic, a special Temple Unit at the State hospital, and other divisions of the Center. The Unit also has the services of a full-time professional counselor, assigned by the State Bureau of Vocational Rehabilitation, and of a young Negro who studied community psychology at Syracuse University and has recently been hired as Vocational Program Specialist. The latter has these major assignments: (a) to work with personnel at Temple Medical Center who are training youngsters the schools have designated as mentally retarded, and to help find jobs for these youngsters when the training period ends; (b) to cooperate with other agencies in an effort to make the most effective use of resources for giving the jobless what they need in the way of job training and help with psychological problems; and (c) to help teen-age gangs organize toward the establishment of their own business ventures.

Recently, too, the State Employment Service has designated the Center as one of its outreach stations, setup to find the person who needs a job and then to help him get it, rather than to find a vacancy and then someone to fill it. Half a day a week a representative of the Service comes to the Center to discuss individuals believed ready for placement.

As of early 1969, the director of the Social Adjustment and Rehabilitation Unit reported that about 25 percent of the patients who had received its services had moved into jobs or training programs, about 25 percent had dropped out, and the other 50 percent were still receiving services in one of the Center's units. He was dissatisfied with this record and with the inability so far to follow up the patients who had moved on or dropped out. Still, he noted, most of the personnel and some of the services were very new.

There is also the Research and Evaluation Unit, established to determine more scientifically the value of the Center and its various programs. Actually, an end to thefts from the Center, or even a 50 percent decline in the hospitalization rate is not a true indication of the value of the Center's programs. The director of this unit, a psychologist, hopes to add an economist, a sociologist, and a systems analyst so that cost-effectiveness studies can be made—that is, studies to answer, "What is the cost of such and such a program in relation to the good it is doing and in relation to the cost-effectiveness of other programs?" Information is being collected on all patients coming to the Center, on what happens to them there, and on their lives after treatment is discontinued. Basic data for program evaluation and planning have been obtained from a survey of the 15 percent provided to catchment area residents during 1966 by all psychiatric facilities in the Philadelphia region, a census of 15 percent of all households in the catchment area, and an attitude survey of 2,000 individuals.

Treatment Teams

To tie the clinical services together, the Center has established on a trial basis three teams of staff members. Their mission is to ascertain and provide—through one or more of the Center's units or from resources outside—the help needed by a given individual for as long as he needs it.

The teams are set up according to the length of service a patient requires.

The Walk-In Team comprises part of the staff of the Crisis Center. Headed by a psychiatric social worker, it includes a psychiatrist, a psychologist, a psychiatric nurse, and four mental health assistants. If the initial evaluation indicates that the patient's problem can be handled in a short time, this team works with him, and often his family, for as long as 30 days. The patient may come to the Center every day to talk about his problems and receive advice, and members of the team may accompany him to other agencies that can give him such concrete help as finding a place to live. Brief hospitalization, as noted in the following section, is available if considered necessary.

The Problem-Solving Team, with a slightly larger staff, assumes responsibility for individuals who can be substantially helped, the evaluation suggests, within 90 days. About a third of its service is extended through home visits.

The Extended-Treatment Team has responsibility for those patients who are judged at the start or at some point later to require long-term help—longer than 90 days. These include not only those psychotics who need hospitalization of some type but also those individuals who seem capable of benefiting from traditional therapy. This team

provides the aftercare for patients discharged from the Temple Unit of the State Hospital.

Both the Problem-solving and the Extended-treatment teams rely heavily on group therapy as well as one-to-one therapy. But each type of treatment is likely to be under the immediate supervision of a mental health assistant.

Facilities for Full-Time Care

Though the Center is proud that it has greatly reduced the rate of traditional hospitalization, it knows that some patients do need 24-hours-a-day care, and for these it has beds in three places:

At the Crisis Center itself, where acutely disturbed individuals—including alcoholics, hallucinating persons, senile people found wandering the streets, and would-be suicides—can be held and treated overnight, if advisable, or even 2 or 3 days and nights, before being transferred to another unit of the Center, outpatient or inpatient. The overnight facilities available at the Crisis Center are scarcely ideal—six beds in windowless cubicles—but they do help keep people out of mental hospitals.

At the Temple University Medical Center, located nearby, where 15 of the 30 beds on the psychiatric ward are available for short-term patients referred by the Center. "Short-term" means up to 4 weeks. At any given time, this facility generally has five patients from the Center. The total is about 120 a year.

In the special Temple Unit of the Philadelphia State Hospital, at least half an hour away by automobile and twice as distant by bus. This is the Center's main resource for patients from its service area requiring inpatient care. The special unit has much the same institutional air as the rest of the hospital, but it is staffed by people, except the attendants, who are responsible to the Center, are paid by the Center, and operate a Center-directed program that includes a daily community session of all patients and staff members, several daily activity groups, and a policy of informal contacts between patients and staff.

Before the community mental health center opened, disturbed persons from its area were committed by the State hospital's reception center in downtown Philadelphia. Some area residents are still taken there, but the reception center officials now send them to the Crisis Center, which often finds that they can be treated more appropriately in the community. For some other persons the State hospital must still be used, but they are placed in the Temple Unit. This division cares for about 220 patients a year. Eventually, Doctor Gardner hopes, such patients will be cared for by a residential program—in two or more houses—in the community.

The Center's Background and Philosophy

A few years ago the University's Department of Psychiatry decided to study the epidemiology of mental illness in the surrounding community because this community had all the characteristics—including crime, alcoholism, drug addiction, poverty, poor housing—that make our urban situation critical. An epidemiological study should provide basic information for the fight against mental illness, and factors associated with it, not only in North Philadelphia but also in similar communities elsewhere.

Gardner, who had established the pioneering and successful Rochester Case Register—a record of people receiving mental health services throughout Monroe County, N.Y.—was brought in to discuss the possibility of setting up an epidemiologic research unit at Temple. The Rochester man suggested a different approach. Since the relations between the University and the community had been less than cordial, he pointed out, a university research team might find it extremely difficult to get the needed facts. Set up a mental health center that doesn't ask the community for anything but instead gives it something, he advised; then the research project can be made part of the Center and will be more likely to succeed. The advice was accepted, and Gardner, who had had experience in community psychiatry as well as in epidemiologic research, was named director of the proposed Center.

Today he still emphasizes service, particularly emergency service, and he views it as more than a medical obligation or a humanitarian goal. His aim is to win community acceptance in order that the Center can provide still more services. "The only meaning we can have," he says, "is through our clinical services. Clinical services that have the most impact on people are the emergency services, which we established right away and for which we are still best known. [A recent television report is noisy with sirens and ablaze with lights as time and again the police rush somebody to the Crisis Center.]

"Most mental health people who have worked in emergency services," the director adds, "tend to function in terms of disposition—do something; get this person out of here so you can be ready for the next one. But anybody who comes into our mental health center is somebody we ourselves should try to help. That means we need a lot of supportive services, such as immediate home visitation, which we are now able to carry out, and different kinds of programs for different kinds of patients, such as alcoholics, drug addicts, and geriatric cases, programs we are now able to offer only to a limited degree."

Social problems contribute to mental illness. In fact, in such a community as North Philadelphia, Gardner believes, they are usually either an important cause or the chief precipitating factor. So the

job of a community mental health center is not only to help the sick individual but also to combat the social forces that probably helped make him sick. "And the first time that we get involved in pushing for better housing, for example—in fact, we have already begun to push, a little—or get involved politically," he says, "we are going to need all the support we can get." Far from being forgotten, nevertheless, epidemiologic research began soon after the Center opened and is becoming increasingly important.

Gardner and the University psychiatric department planned that the Center would operate mainly from the Temple Medical Center. As opening time approached, however, it became apparent that the new facility could be spared only a room or two. The University then made available five attached houses on Ontario Street, near the hospital, which it had been using as dormitories or offices, and paid for renovations. The houses are narrow, three-story, steep-staired structures, typical of many in the community, though the others usually have been divided into apartments. Most of the rooms are small.

"There is a certain romanticism about working in old, renovated houses," says the director. "Also, it enables us to fit better into the community and be less institutional in appearance. But we pay a price for it because the space is not functionally right."

Even with five houses the Center was cramped almost from the start. Then the city's Child Welfare Department offered to use a grant from the Philadelphia Foundation to pay for consultative services. With this money the Center rented additional facilities two blocks away. Among these is the Manse, so called because the minister of the Tioga Presbyterian Church used to live there, a large Victorian house of white-painted brick. It is set well back from the street, with the old stone church, which still functions, running along one side and wrapping itself around the rear. The Manse provides offices for the director and other administrative officials and rooms for consultative and community organizational services. Several other offices and an auditorium and activities room are in the church building, reached from the Manse by a catwalk at the second-story level.

Staffing grants from NIMH totaled slightly more than \$1 million in 3 years, with matching funds coming from the University and the State. These funds must go up as the Federal portion of staffing money goes down, annually. Doctor Gardner has considered applying for a construction grant but has not been able to obtain the money to match it. He and his staff are certain they could work more efficiently if the Center had more room, all of it under one roof except for the satellite centers and the other outposts being planned. For the present, however, the problem of space must be met on a make-do basis.

About 40 percent of the professional staff are Negroes. Among these

are two of the eight psychologists; eight of the 14 social workers, including the chief social worker; and 10 of the 16 psychiatric or public health nurses, including the chief nurse. All 10 psychiatrists are white, but efforts are being made to employ two Negroes. Of the 140 persons at the nonprofessional level—including secretaries and mental health assistants—about 80 percent are black.

The director's emphasis on service and on nontraditional ways of delivering it is echoed throughout the Center. Listen to the experiences and views of some of the senior staff members:

Anthony F. Panzetta, M.D., Director of the Psychosocial Clinic and the Crisis Center, speaking of the days when the clinic was located at Temple Medical Center and the patients were assigned to psychiatric residents at the hospital working under the supervision of a psychiatrist from the mental health center:

"It quickly became apparent that psychiatric residents had been oriented toward the evaluation, diagnosis, and treatment of persons whose primary symptomatology and complaints remained rather discretely within the language of psychological disorder. Patients from our catchment area tended to mix their complaints with the many reality problems which complicated their lives. There was a continuing impression that the treatment of this population was in fact an inferior task and one that was ill-suited for the training of psychiatric residents whose ambition was to perform more traditional psychotherapy with more traditional patients in more traditional settings. Residents and staff men alike also felt a significant degree of frustration and they recognized their own inability to respond to the urgency and demands of the patients from this population. It was also clear at this early stage of development that patients themselves were dissatisfied and tended not to return."

Bernard Borislaw, Ph. D., Assistant Director for Administration, speaking of how to help people from what are generally called 'multi-problem families':

"Until recently, many if not most of us mental health professionals have kept searching for pathology until we have assured ourselves that not too much can be done for this person and therefore we have the rationale—the cop-out—for not trying to do much. We say 'Gee, this is a sad case' and we speak of 'multiproblem families.' That very term itself makes us tend to minimize our efforts to help."

"People haven't been paying much attention to the other side of the coin—the minimum resource family. While it is important to understand the pathology, it is also important to understand the good things that must be working for the family—what these things are and how they can be strengthened, what the interests and unrecognized resources of the individual are and how they can be built upon. I don't care if we are talking about even a schizophrenic who is hallucinating. Maybe the first thing we could do to help such a person is to get him not to tell anybody. Is it impor-

tant to get such a person into some training or activities program so that he can feel better from gradually knowing that he can do something important, and so that he can gradually recognize that it is important to show up at a place on time and stay there for a while and leave when everybody else leaves, and that it is important to learn how to work under supervision? What we are trying to do here is to influence the professionals, who are teaching the paraprofessionals, in order to contradict the natural tendency to do things that they learned in their own training. You can say, 'Well, we are going to do social psychiatry or community mental health,' and yet do nothing more than change the name of the game. That's what we have been working on, and we think we have been successful."

William Hetznecker, M.D., Director of the Children and Family Unit, talking about some of the functions of a community mental health center:

"One function is to bridge the gap--to be a kind of mediator--between the community and the institutions that are supposed to serve the community. Today in this community, for example, the schools are alienated from the people. So we have been working on ways to open the schools to community people--not just people with credentials, like psychiatrists, but people who represent the community rather than the System--so they can help teachers and kids with problems of motivation, of behavior, of black-white relations. People with the backing of an agency like ours can put pressure on the schools to look at what they are doing--and what they are doing may result, for example, in a kid's being several years behind in reading by the time he reaches sixth grade. The community representatives are going to raise some--. But you can raise--so that nothing gets done and the schools get shut down, or you can do it another way. Without this destructive, paralyzing confrontation, you can promote change from the inside.

"The idea that child psychiatrists are the people who should deal with problem children has lasted too long. It has given everybody the chance to push the kids over to the psychiatrists, and it has built up the problem of waiting lists and duration of treatment. In the mental health center you have to say, 'Look, lots of people are good at dealing with kids. Parents are very good, youth workers are good, mental health workers are good, teachers are good.' What you want to do is help them to be better, to bring out their potential, to help them communicate, and to get them to want to share their skills."

David Berger, Ph. D., Director of the Research and Evaluation Unit, talking about some of the major goals of his work:

"I do not believe that people go to a setting such as this because they are hallucinating, or because they are compulsive, or hysterical, or whatever. I think they come because they are in trouble in terms of their behavior in four main areas of living: family relationships; social productivity, or vocational and educational relationships; self-care; and relationships with the law. Those four areas are important, I think, if people are to get along in their communities, regardless of what community they live in."